

Partial translation of JP61-80051 A

Claims

1. A method of analyzing an amino acid, which comprises modifying an amino acid with 7-fluoro-4-nitrobenzo-2-oxa-1,3-diazol (NBD-F), separating the modified amino acid (NBD-amino acid) by liquid chromatography, and measuring the separated NBD-amino acid with a fluorescence detector using a laser beam as a light source.

2. The method of claim 1, wherein the light source is a polarized argon laser, and a flow cell having a structure capable of receiving fluorescence with an optical fiber from the direction parallel to a plane of polarization of the laser is used.

Detailed Description of the Invention (Partial)

The inventors of this invention have found that, in the fluorescence measurement of an amino acid modified with 7-fluoro-4-nitrobenzo-2-oxa-1,3-diazol (NBD-F), the background light due to Raman scattering can be removed by a fluorescence measurement method using a laser beam as a light source and the sensitivity increases strikingly. In addition, they have found a method and an apparatus, which use a polarized argon laser as a light source and a flow cell having a structure that receives fluorescence with an optical fiber from the direction parallel to a plane of polarization of the laser, which can drastically decrease not only Raman scattering but also Rayleigh scattering and scattering due to diffraction and reflection on the cell wall and the like and increase sensitivity of an amino acid modified with 7-fluoro-4-nitrobenzo-2-oxa-1,3-diazol (NBD-F).